What is claimed is:

1. A method for scheduling mobile station uplink transmissions by a base station comprising steps of:

receiving scheduling information from at least one mobile station of the plurality of mobile stations, wherein the scheduling information comprises at least one of a queue status and a power status of the at least one mobile station;

selecting a mobile station of the plurality of mobile stations and determining an uplink channel scheduling assignment for the selected mobile station using at least one of the scheduling information and a base station interference metric and a link quality corresponding to the selected mobile station; and

transmitting the uplink channel scheduling assignment to the selected mobile station, wherein the uplink channel scheduling assignment comprises at least one of a transmission assignment, a maximum power margin target, a maximum power level target and transport format and resource-related information (TFRI) assignment.

2. The method of claim 1, wherein the scheduling information is received via a reverse link control channel.

3. The method of claim 1, wherein the power status corresponds to a power level of a Dedicated Physical Control Channel (DPCCH).

4. The method of claim 1, wherein the power status is based on a difference between a Dedicated Physical Control Channel (DPCCH) power level and a maximum power level supported by the mobile station.

5. The method of claim 1, wherein the queue status corresponds to a size of a data queue.

6. The method of claim 5, wherein the queue status further indicates a size of a layer 3 signaling queue.

7. The method of claim 5, wherein the queue status further indicates that a layer 3 signaling queue is non-empty.

8. The method of claim 1, further comprising conveying base station interference information to the selected mobile station via a forward link control channel.

9. The method of claim 1, wherein the link quality is the link quality of an uplink channel from the selected mobile station.

10. The method of claim 1, wherein the link quality is the link quality of a downlink channel from a base station to the selected mobile station.

11. A method for scheduling a mobile station transmission comprising:

scheduling, by a base station of a plurality of base stations, a mobile station of a plurality of mobile stations for a transmission interval based on scheduling information received from each mobile station of the plurality of mobile stations and further based on a link quality metric;

receiving, by the base station from the scheduled mobile station, a first transmission of data, which transmission of data is conveyed by the mobile station during the transmission interval and comprises transport format and resource-related information (TFRI);

decoding the first transmission of the data;

when the first transmission of the data is not successfully decoded, receiving, by the base station, communications from the scheduled mobile station corresponding to at least one retransmission of the data;

combining, by the base station, each of the at least one retransmission of the data with the previously received data to produce combined data until the first to occur of a successful decoding of the combined data or a flushing of a Hybrid Automatic Repeat Request (H-ARQ) buffer;

when one of the first transmission of data and the combined data is successfully decoded, conveying an acknowledgment to the mobile station; and

in response to conveying the acknowledgment, flushing the H-ARQ buffer.

12. The method of claim 11, wherein flushing the Hybrid Automatic Repeat Request (H-ARQ) buffer comprises in response to conveying the acknowledgment, receiving an instruction to flush the H-ARQ buffer and flushing the buffer.

13. The method of claim 11, wherein the transport format and resource-related information (TFRI) is received via a reverse link control channel.

14. The method of claim 11, further comprising, when the combined data is not successfully decoded prior to an expiration of a timer, flushing the Hybrid Automatic Repeat Request (H-ARQ) buffer.

15. The method of claim 11, further comprising:

determining a reverse link power control metric;

comparing the reverse link power control metric to an inner loop power control setpoint; and

flushing the Hybrid Automatic Repeat Request (H-ARQ) buffer when the reverse link power control metric compares unfavorably with the inner loop power control setpoint.

16. The method of claim 11, further comprising:

receiving a new data indicator; and

flushing the Hybrid Automatic Repeat Request (H-ARQ) buffer based on a state of the received data indicator.

17. The method of claim 11, wherein the scheduling information is received via a first reverse link control channel and the transport format and resource-related information (TFRI) is received via a second reverse link control channel.

18. The method of claim 11, wherein the scheduling information is received via a first reverse link control channel and the transport format and resource-related information (TFRI) is blindly detected by a receiving base station.

19. The method of claim 11, wherein the scheduling information comprises power status and queue status information.

20. The method of claim 19, wherein the power status corresponds to a power level of a Dedicated Physical Control Channel (DPCCH)

21. The method of claim 19, wherein the power status is based on a difference between a Dedicated Physical Control Channel (DPCCH) power level and the maximum power level supported by the mobile station.

22. The method of claim 19, wherein the queue status corresponds to a size of a data queue.

23. The method of claim 22, wherein the queue status further indicates a size of a layer 3 signaling queue.

24. The method of claim 22, wherein the queue status further indicates that a layer 3 signaling queue is non-empty.

25. The method of claim 11, further comprising conveying base station interference information to the selected mobile station via a forward link control channel.

26. The method of claim 25, further comprising mapping one or more sub-frames of the transmission interval to associated transport format and resource-related information (TFRI).

27. The method of claim 25, further comprising determining a maximum Enhanced Uplink Dedicated Transport Channel (EUDCH) to Dedicated Physical Control Channel (DPCCH) (DPPCH) power ratio for the mobile station based on base station interference information.

28. The method of claim 11, wherein scheduling comprises informing the mobile station of a number of sub-frames on which the mobile station may transmit and a location of the sub-frames in the transmission interval.

29. A method for transmitting data by a mobile station comprising steps of:

transmitting data in a first reverse link channel; and

transmitting corresponding transport format and resource-related information (TFRI) in a second reverse link channel, wherein the TFRI can be used to demodulate and decode the transmitted data.

30. The method of claim 29, wherein the transport format and resource-related information (TFRI) is transmitted via a second reverse link control channel.

31. The method of claim 29, further comprising:

receiving a scheduling assignment that comprises interference information associated with a base station; and

determining the transport format and resource-related information (TFRI) based on the received interference information.

32. The method of claim 31, wherein receiving a scheduling assignment comprises receiving a plurality of scheduling assignments from a plurality of base stations, wherein each scheduling assignment of the plurality of scheduling assignments is associated with interference information, and wherein the method further comprises choosing a scheduling assignment of the plurality of scheduling assignments based on the associated interference information.

33. The method of claim 32, wherein the interference information associated with each scheduling assignment comprises transport format and resource-related information (TFRI).

34. The method of claim 32, further comprising determining the corresponding transport format and resource-related information (TFRI) transmitted in the second reverse link channel based on the TFRI of only one base station of the plurality of base stations.

35. The method of claim 31, wherein the scheduling assignment is received via a forward link control channel.

36. The method of claim 29, further comprising:

receiving interference information from a plurality of base stations; and

determining the corresponding transport format and resource-related information (TFRI) transmitted in the second reverse link channel based on interference information of only one base station of the plurality of base stations.

37. The method of claim 36, wherein determining comprises determining the transport format and resource-related information (TFRI) based on a base station with a largest Enhanced Uplink Dedicated Transport Channel (EUDCH) to Dedicated Physical Control Channel (DPCCH) (DPPCH) power ratio.

38. The method of claim 29 wherein the first reverse link channel and the second reverse link channel are time multiplexed on a same physical control channel such that, in a given transmission interval, either a first reverse link channel ten (10) millisecond (ms) frame format is used or a second reverse link channel two (2) millisecond (ms) frame format is used.

39. The method of claim 38, wherein when there is not a scheduled transmission interval then the first reverse link channel ten (10) millisecond (ms) frame format is used and when there is a scheduled transmission interval then the second reverse link channel two (2) millisecond (ms) frame format is used.

40. The method of claim 29, wherein the second reverse link channel has a first part and a second part, wherein the second part can be decoded separate from the first part, and wherein the first part comprises block size and modulation and coding information and the second part comprises Hybrid Automatic Repeat Request (H-ARQ) and Incremental Redundancy version information.

41. A method for controlling communications with a mobile station by a base station comprising steps of:

storing, by the base station, traffic data from the mobile station in a traffic data buffer;

determining a link quality metric at the base station;

comparing the link quality metric to a threshold; and

when the link quality metric compares unfavorably with the threshold, flushing the traffic data buffer.

42. The method of claim 41, wherein the link quality metric comprises a reverse link power control metric and wherein comparing comprises comparing the reverse link power control metric to an inner loop power control setpoint.

43. The method of claim 42, wherein the threshold comprises a first threshold and wherein the link quality metric compares unfavorably with a threshold when a ratio of the reverse link power control metric to an inner loop power control setpoint exceeds a second threshold.

44. The method of claim 43, wherein the link quality metric is computed based on a reverse link pilot signal.

45. A method for controlling communications with a mobile station by a base station comprising steps of:

storing, by the base station, traffic data from the mobile station in a traffic data buffer;

transmitting, by the base station, first control data to the mobile station on a downlink control channel;

upon transmitting the first control data, starting, by the base station, a timer; and

when a predetermined period of time expires prior to receiving second control data from the mobile station on an uplink control channel, flushing the traffic data buffer.

46. A method for controlling communications with a mobile station by a base station comprising steps of:

determining, by the base station, a link quality metric at the base station;

comparing, by the base station, the link quality metric to a threshold; and

when the link quality metric compares unfavorably with the threshold, deallocating, by the base station, demodulation resources allocated to a first uplink control channel associated with the mobile station while maintaining allocation of demodulation resources associated with a second uplink control channel that is associated with the mobile station.

47. The method of claim 46, wherein the link quality metric comprises a reverse link power control metric and wherein comparing comprises comparing the reverse link power control metric to an inner loop power control setpoint.

48. The method of claim 47, wherein the threshold comprises a first threshold and wherein the link quality metric compares unfavorably with a threshold when a ratio of the reverse link power control metric to an inner loop power control setpoint exceeds a second threshold.

49. The method of claim 48, wherein the link quality metric is computed based on a reverse link pilot signal.

50. A method for controlling communications with a mobile station by a base station comprising steps of:

transmitting, by the base station, first control data to the mobile station on a downlink control channel;

upon transmitting the first control data, starting, by the base station, a timer; and

when a predetermined period of time expires prior to receiving second control data from the mobile station on an uplink control channel, deallocating, by the base station, demodulation resources allocated to a first uplink control channel associated with the mobile station while maintaining allocation of demodulation resources associated with a second uplink control channel that is associated with the mobile station.

51. A method for selecting a scheduling assignment by a mobile station comprising steps of:

receiving a scheduling assignment from each base station of a plurality of active set base stations to produce a plurality of scheduling assignments; and

selecting a scheduling assignment of the received plurality of scheduling assignments.

52. The method of claim 51, wherein the scheduling assignments are received via a forward link control channel.